



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/514,031	02/25/2000	Gregory Michael Orme	ORME-001	7522

7590 05/25/2004
Greg Orme
310 Oakwood Cove
La Vergne, TN 37086-4130

EXAMINER

BUGG, GEORGE A

ART UNIT	PAPER NUMBER
----------	--------------

2613

DATE MAILED: 05/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/514,031	02/25/2000	Gregory Michael Orme	ORME-001	7522

7590

03/02/2004

John B Sowell
182 Midfield Road
Ardmore, PA 19003-3213

EXAMINER

BUGG, GEORGE A

ART UNIT	PAPER NUMBER
----------	--------------

2613

3

DATE MAILED: 03/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/514,031

Applicant(s)

ORME, GREGORY MICHAEL

Examiner

George A Bugg

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the elements of the device as claimed in claims 1-4 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim Objections

3. Claim 14 is objected to because of the following informalities: Claim 14 depends from itself. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

5. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 1-4, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 5,905,593 to Lo et al.

8. With regard to claim 1 and 20, Applicant claims **“A device for transmitting a 3D image, the device having a converter for converting 2D image signals representing a 3D image into image signals representing a 3D image, a transmitter means for transmitting 2D image signals to the converter and the converter in use being adapted to emit the image signals representing a 3D image whereby an observer is able to observe a 3D image represented by the image signals.”**

9. Column 3, lines 12-49, of the Lo reference, disclose a 3D viewing system. Lo further states that video signals can be received by an antenna or conveyed from a signal conveyor, which conveys images stored in a proper storage medium. In addition, Lo teaches that the images conveyed are composite views, i.e. 3D images, which are composed from 2D images. Moreover, element 20 of Figure 1 is a lenticular layer, which is used to convert the conveyed 2D images into a 3D image which is viewable, or observed by an observer by watching the screen of element 10, in Figure 1.

10. With regard to claim 2, as shown in Figure 1, the Lo apparatus contains a converter with a screen, which emits the image signals that represent the 3D image.

11. As for claim 3, as shown in Figure 1, the lenticular lens layer 20 has an outer surface with a predetermined three-dimensional topography.

12. As for claim 4, Lo states in column 3, lines 26-35, that the lenticular layer is attached to the monitor screen such that the longitudinal axes of the lenticules are

Art Unit: 2613

substantially oriented in the vertical direction, or perpendicular to the lines joining a viewers eyes to the axes. In other words, 2D images will be emitted from the outer surface of the monitor screen 10, and into the lenticular lens layer 20, perpendicular to the lens layer 20, or a surface having a three dimensional configuration with periodic peaks and troughs, as shown.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 5-19 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,905,593 to Lo et al.

15. As for claims 5 and 6, Figures 3 and 5 shows light being emitted from the outer surface of the screen. While Lo does not show the particulars pertaining to a periodic wave pattern, all light travels in a waveform which has a frequency, and therefore is periodic, or based on time.

16. As for claims 7 and 8, any one of the lenticules of element 20, shown in Figure 1 can be construed as an emitter, since light passes through them. Moreover, each one individually, and collectively, is associated with part of a 3D image, and the 3D as a whole respectively.

Art Unit: 2613

17. As for claims 9 and 10, Figure 1 shows the lenticules evenly distributed, and wherein the outer surface of element 20, is the emitter, as shown in Figures 3 and 5.

18. With respect to claims 11 through 18, it is the opinion of the Examiner, that the emitter pattern, its physical make-up and or shape, and various other limitations as claimed, are a matter of obvious variation. Emitter spacing and shapes are often manipulated in an effort to control the direction and amount of light, which passes through them, and are well known techniques in the art of 3D imaging. Furthermore, such manipulation are in fact taught by the Lo reference, as shown in Figure 5, wherein the spacing of lenticules is critical to the emission pattern.

19. With regard to claim 19, column 3, as well as Figure 1, shows the lenticular layer as a sheet, which can be either temporarily or permanently mounted, to a television monitor. Moreover, it has a predefined shape, and the lenticules are evenly spaced across the layer.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George A Bugg whose telephone number is (703) 305-2329. The examiner can normally be reached on Monday-Thursday 7:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S Kelley can be reached on (703) 305-4856. The fax phone

Art Unit: 2613


number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

George A Bugg
Examiner
Art Unit 2613

GAB

February 25, 2004


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600